County of Los Angeles
Enterprise Geographic Information Systems (eGIS) Program

LA County GIS Viewer

Class 1: Introduction to the LA County GIS Viewer

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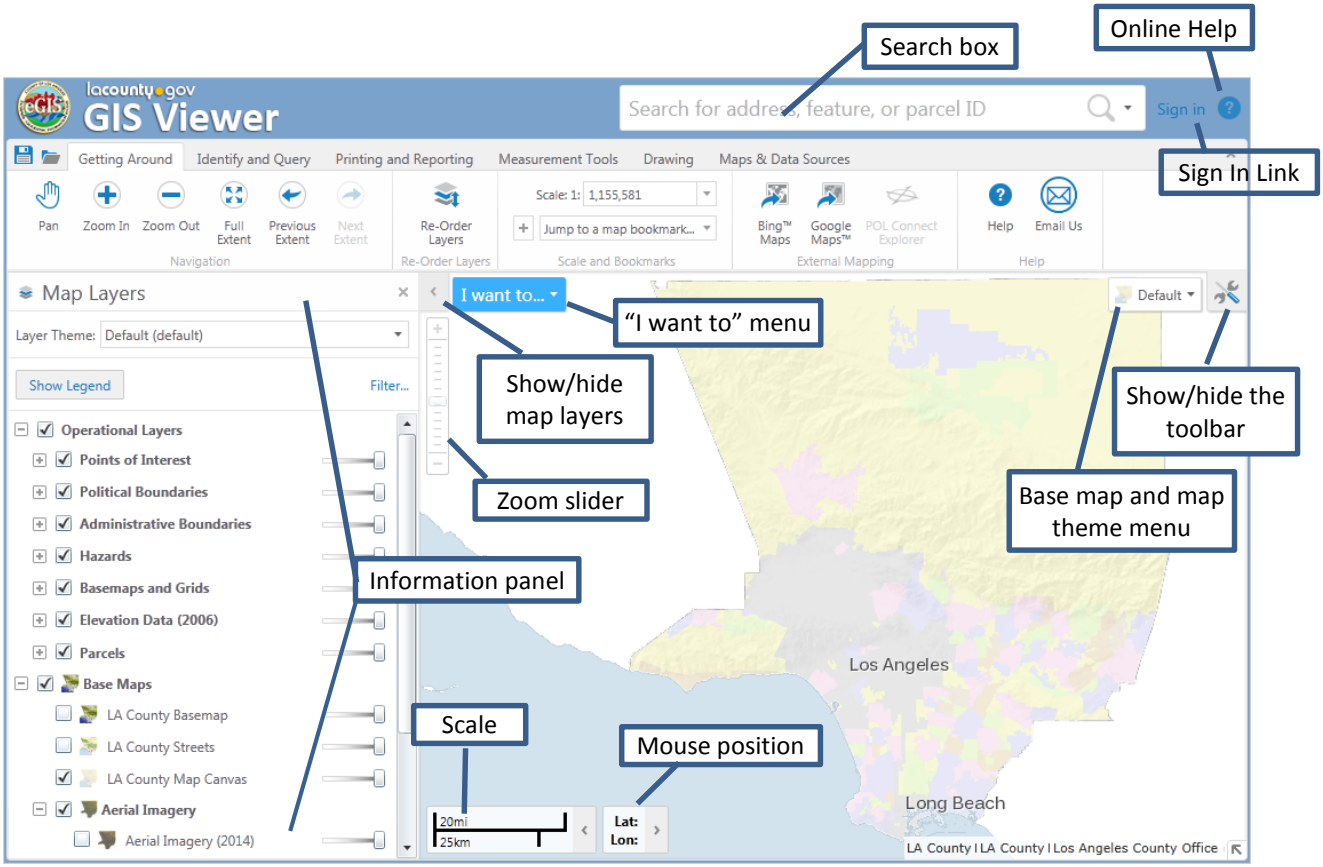
Version 1.1

1. Introduction

The LA County GIS Viewer was created by the Chief Information Office and the Internal Services Division Enterprise Geographic Information Systems (eGIS) Program. The objective of the GIS Viewer is to enable wide access to the County's authoritative GIS data through a powerful set of web-based GIS tools. Anyone can use them to explore geographic phenomena, perform basic spatial analysis, and create custom maps and reports. The best part of the GIS Viewer is that it is free! All you need is a web browser. If you have previously used Esri ArcMap or any other GIS software, then this GIS Viewer should be relatively easy to use and navigate. If you are a new or novice user of GIS, then this document will serve you quite well.

2. LA County GIS Viewer Layout

Launch an internet browser, type in the following URL address for the launch page, and your GIS Viewer will load in a few seconds - http://gis.lacounty.gov/gisviewer. It may some time because there are many layers of information being loaded. If you are to bookmark this application, please bookmark the launch page. The application's URL will change from time to time and if you have bookmarked the old viewer URL, it will be broken.



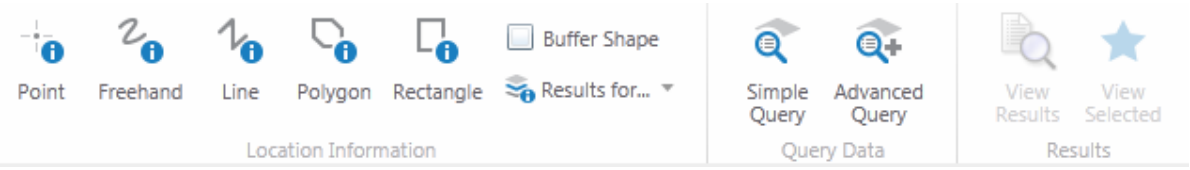
Note: Changes are occasionally made to the GIS Viewer interface so it may appear differently here.

Here is a brief description of the navigation features in the main screen of the GIS Viewer:

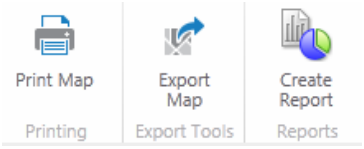
"I want to…" menu: A menu of shortcuts to frequently-used tools.
Show/hide map layers: When you chose to show layers, an information panel appears where you can select different layers to hide/show on the map and also adjust their transparency levels.
Zoom slider: Use this slider to zoom in or out on the map by clicking the + or - or by dragging the marker up and down.
Search box: You can type in the name of a feature to search for it on the map.
Online Help: Takes you to the Geocortex Viewer for Silverlight Help interface
Show/hide toolbar: Shows or hides the toolbar when clicked.
Base map and map theme menu: This menu lists the Base Maps and any Layer Themes
Information panel: This interactive panel allows you to manipulate (i.e. hide or show) different layers, adjust the layer's transparency, etc. and the panel displays results upon using the Identify tool or performing a search
Scale: The current scale of the map.
Mouse position: The position (co-ordinates) of the computer cursor on the current map. To hide the mouse position, click the small arrow on the right.

The toolbar contains many tools and they are grouped into tabs by their functions. The default tab that appears is the Getting Around tab:

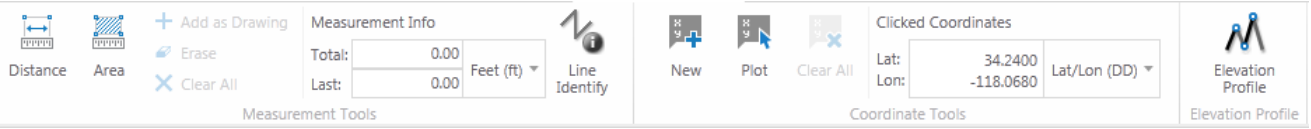
Identify and Query tab:



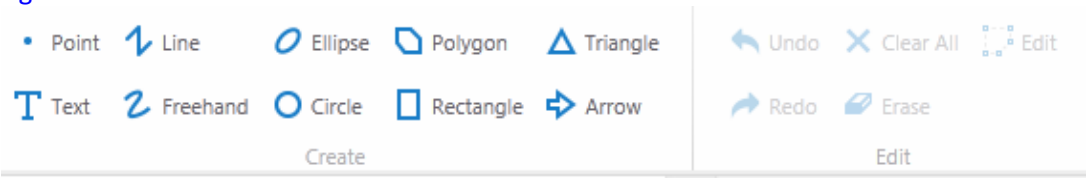
Printing and Reporting tab:



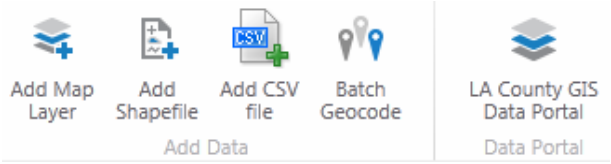
Measurement Tools tab:



Drawing tab:



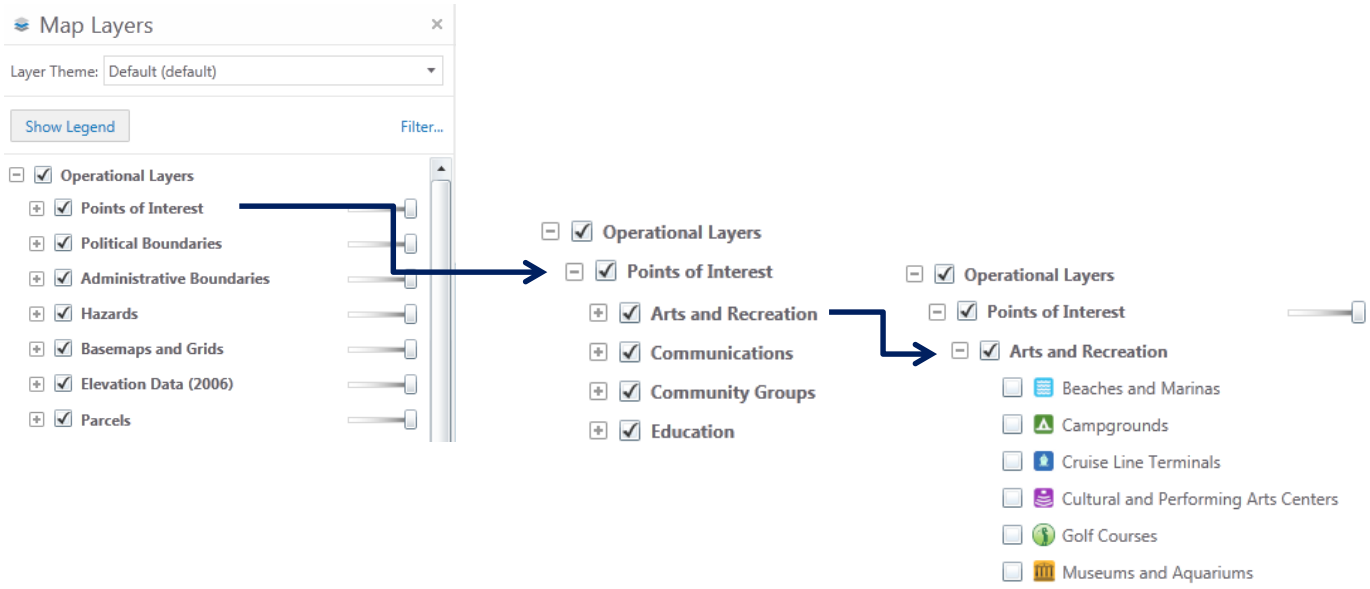
Maps & Data Sources tab:



2. Navigating the GIS Viewer

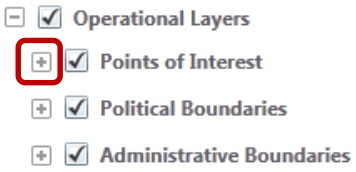
2.1 Map themes and layers

Map themes are customized maps that emphasize a particular theme or a special topic. The GIS Viewer opens up to the "Default" map theme which consists of popularly "searched for" datasets within the County and are categorized into seven group layers: Points of interest, Political Boundaries, Administrative Boundaries, Hazards, etc. These seven group layers may further be divided into sub-categories and then you will see the individual map layers (Beaches and Marinas, Campgrounds, etc.).

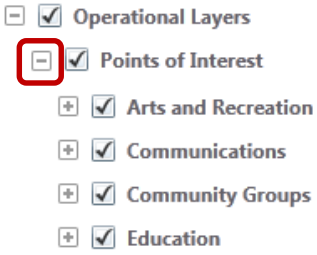


Each map layer is used to display and interact with a specific GIS dataset. The layer references the data stored in our server and we have customized the data to display in its most meaningful way for our users.

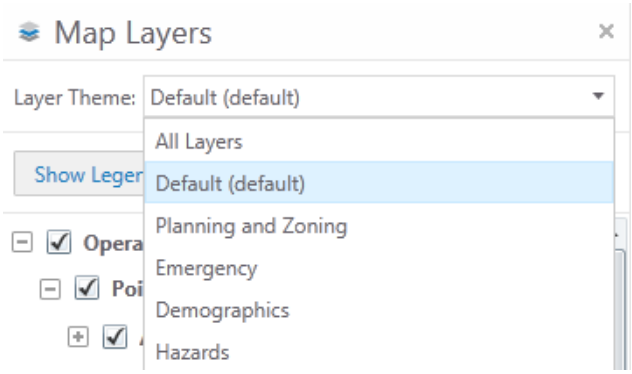
To expand a group layer, click on the Plus icon to the left of its name.



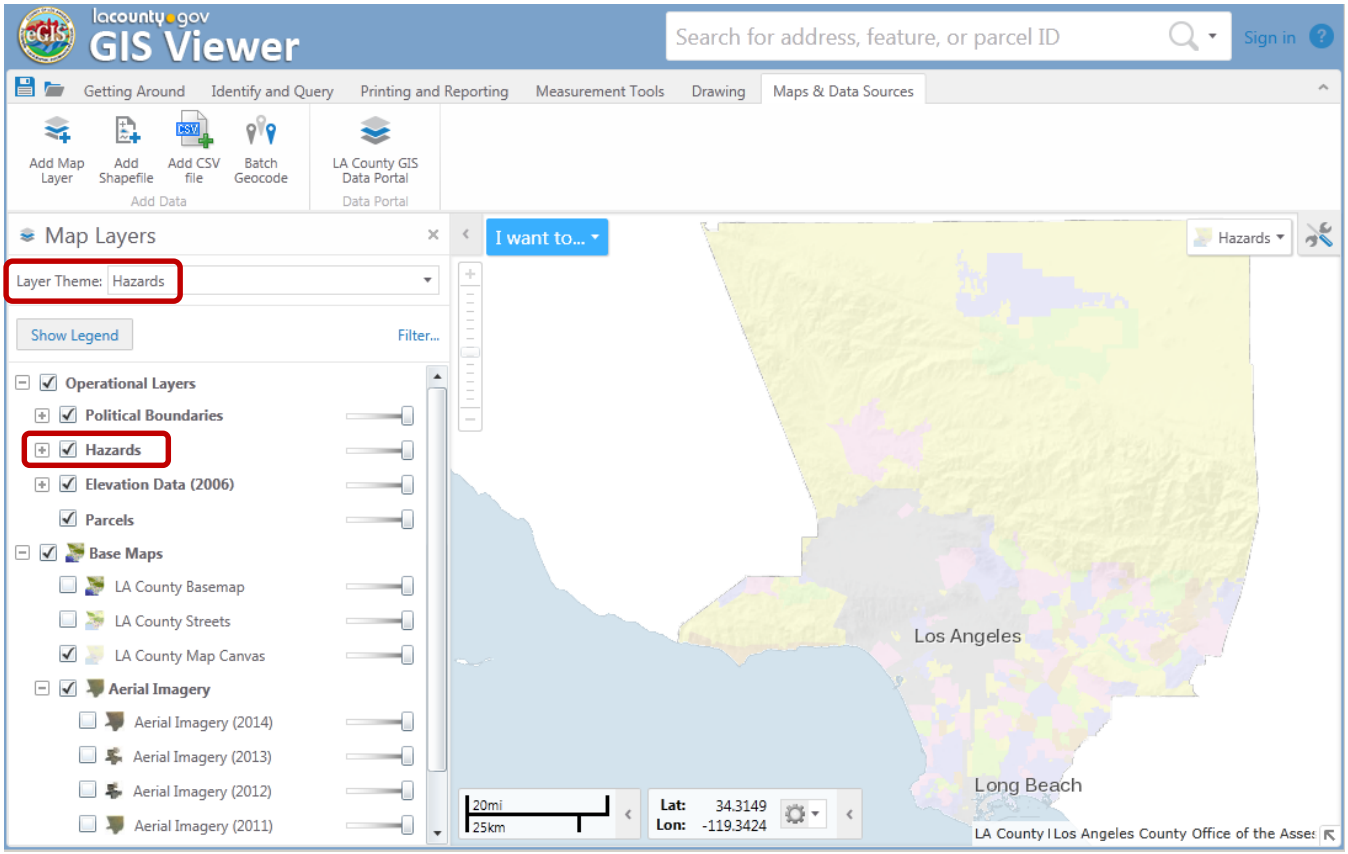
To collapse the group layer, click on the Minus sign.



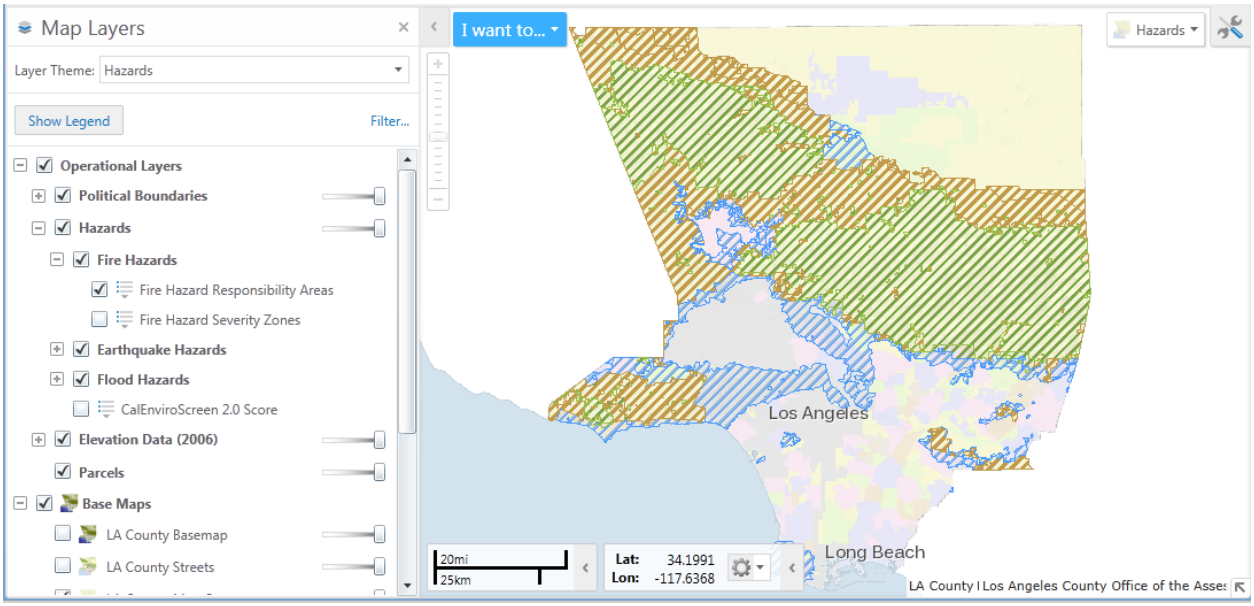
A few map themes have already been created for you to use. When you select a theme (e.g. Redistricting), map layers will subsequently turn off and on by themselves and the map will refresh itself on the right-hand side.



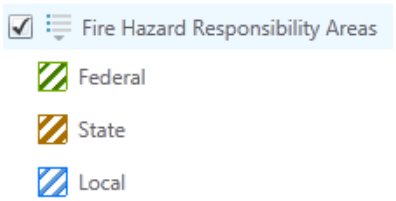
Select “Hazards” and a new set of layers will appear (see figure on next page).



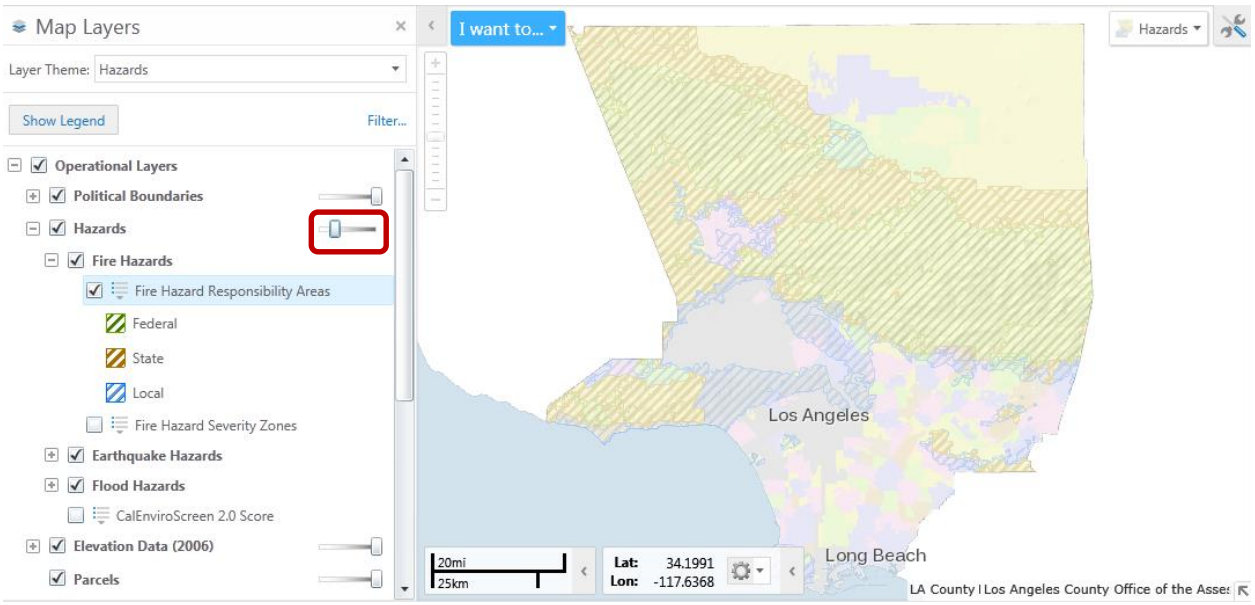
Expand the Hazards layer > Expand Fire Hazards > Turn on “Fire Hazards Responsibility Areas” by checking it on.



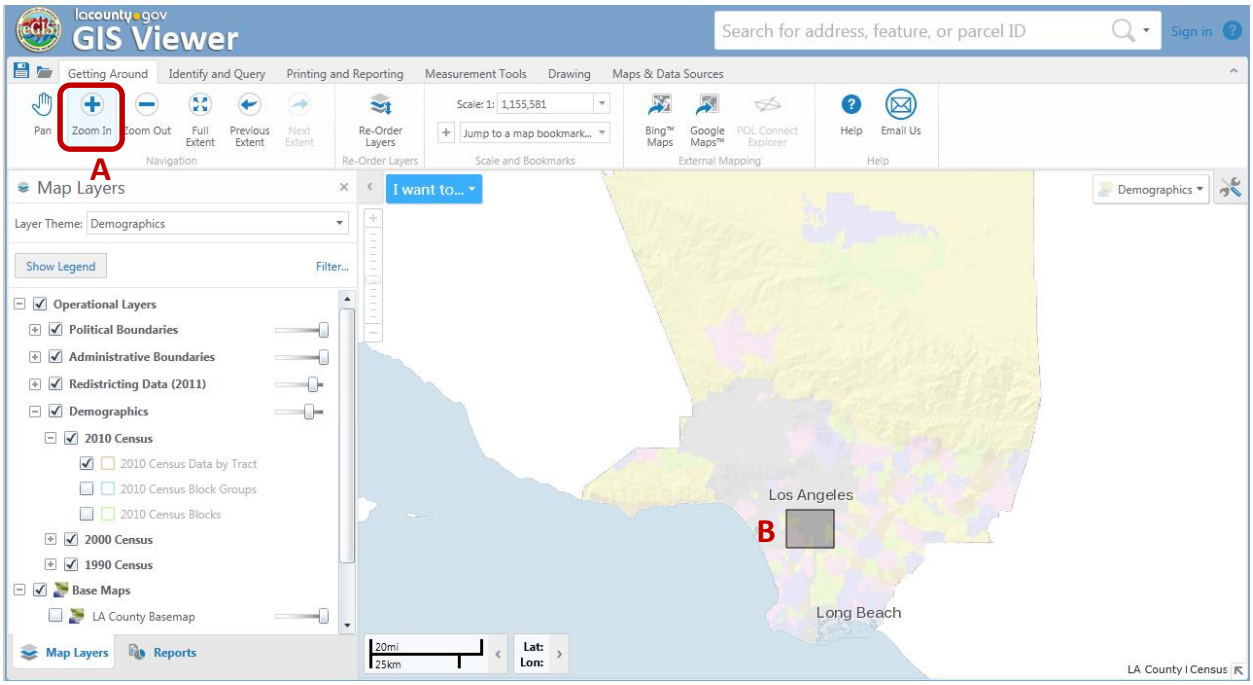
To see what each color means, click on the legend icon and the symbologies will appear:



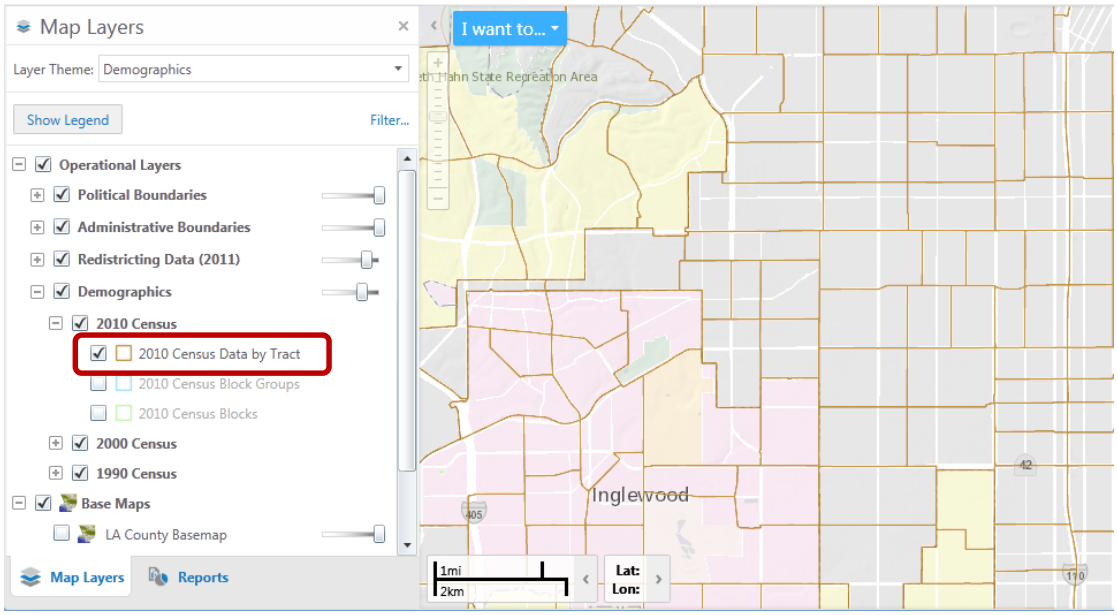
The group layers can be set to display at some percentage of transparency. The transparency slider allows you to set the transparency level of each map layer. This allows the features beneath them to be visible while seeing the partially transparent features as well. Move the bar on the transparency slider to see the effects.



Switch your map theme to “Demographics”. Use the tools in the “Getting Around” tab to pan and/or zoom into a location of your choice (see label A). When using the “Zoom In” tool, you will draw a box by clicking and dragging your mouse. Once you left-click on an area of the map, don’t let go of the mouse button. When you move or drag your mouse, a box automatically forms for you (see label B). Release the button of your mouse when you are satisfied with the box you have drawn and the map will refresh itself.



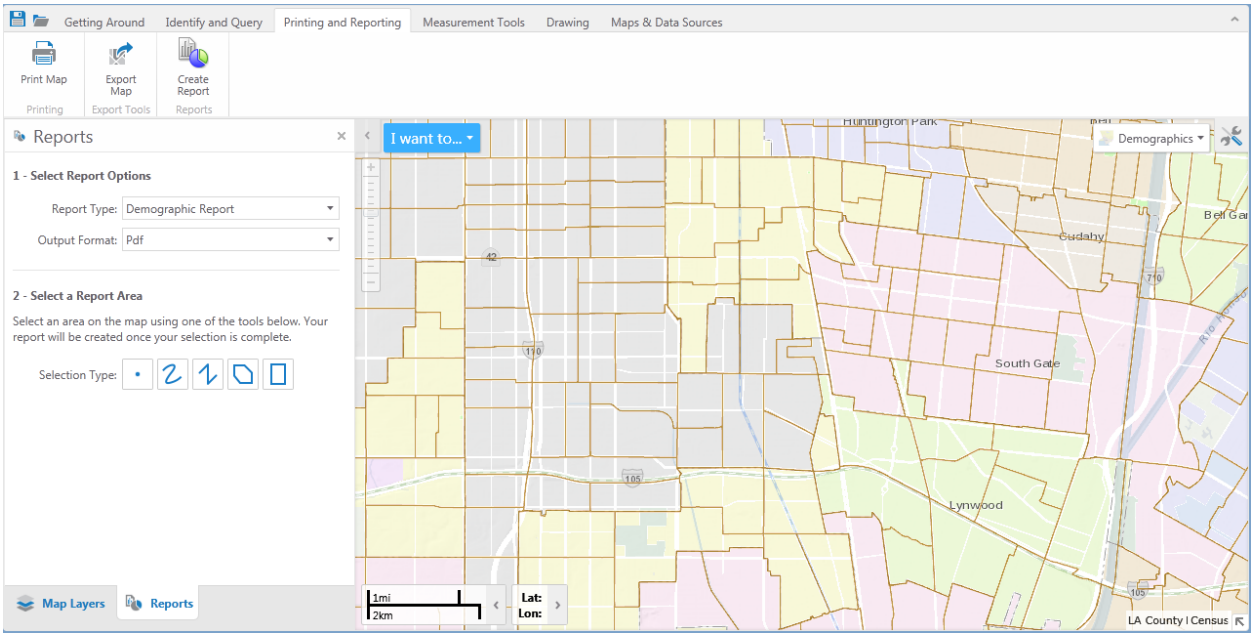
The 2010 Census Data by Tract layer will automatically be turned on.



2.2 Create a Demographic Report

You may instantly create a 2010 Demographic Report based on the census tract(s) that you are interested in. Click on the “Printing and Reporting tab” and then click on “Create Report”.

Under Step #2 “Select a Report Area,” choose a selection type. If you choose the dot, then you can only select one census tract. The remaining four options allow you to select multiple census tracts from either drawing a line or a polygon. Choose a method of your choice for selecting your census tract(s).



The census tract(s) that you selected are highlighted in a bright yellow. Click on the “Download Report” button. The report not only lists the total population numbers of the census tract(s) but the report also includes Male Population, Female Population, Sex by Age, Race, Housing Units, Occupancy Status, Tenure, Household Size, and the Average Median Household Income (see figure on next page).

2010 Census Tracts Summary Report

This report summarizes the demographic characteristics of the census tract(s) you have selected from the LA County GIS Viewer.
Data source: U.S. Bureau of the Census, Census 2010

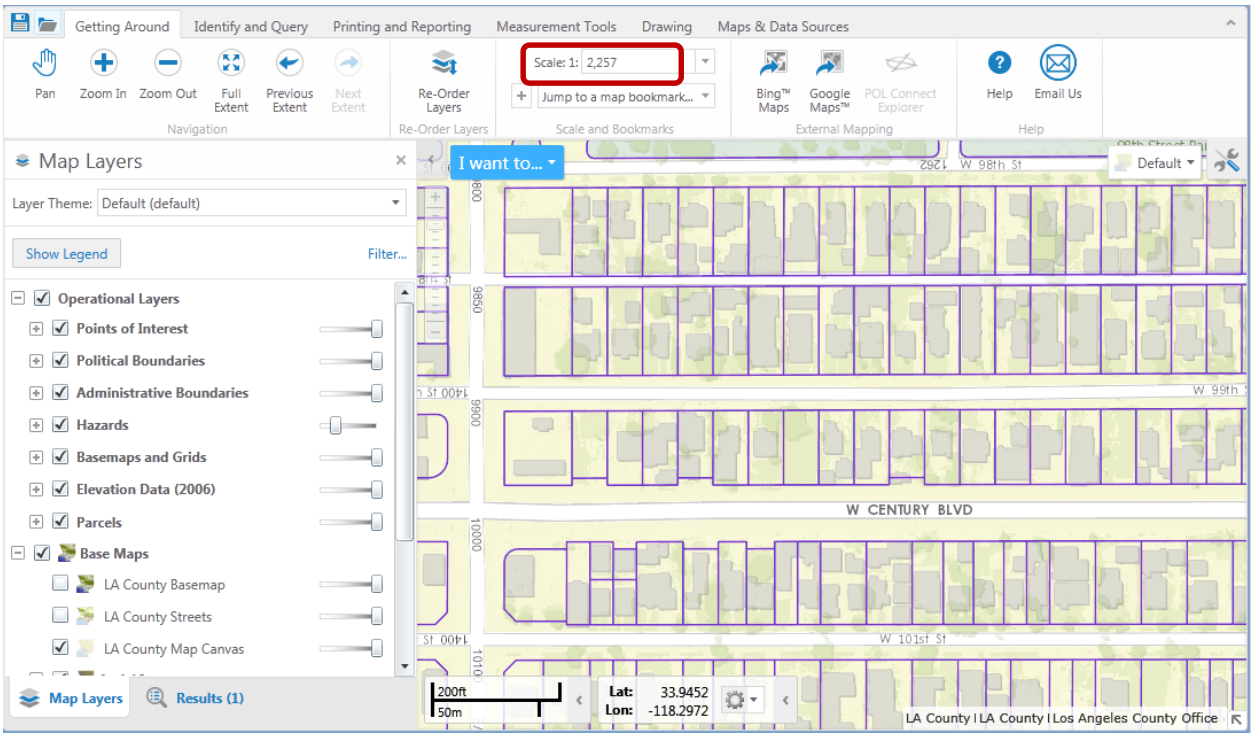
Subject	Number
Total Population:	6,670
Sex by Age	
Male	3,459
Under 5 years	277
5 to 9 years	268
10 to 14 years	305
15 to 17 years	189
18 and 19 years	114
20 years	40
21 years	61
22 to 24 years	169
25 to 29 years	306
30 to 34 years	326
35 to 39 years	280
40 to 44 years	261
45 to 49 years	240
50 to 54 years	215
55 to 59 years	162
60 and 61 years	40
62 to 64 years	60
65 and 66 years	32
67 to 69 years	22
70 to 74 years	39
75 to 79 years	29
80 to 84 years	12
85 years and over	12
Female	3,211
Under 5 years	278
5 to 9 years	279
10 to 14 years	270
15 to 17 years	187
18 and 19 years	126
20 years	46
21 years	62
22 to 24 years	167
25 to 29 years	256
30 to 34 years	258
35 to 39 years	239
40 to 44 years	214
45 to 49 years	218
50 to 54 years	197
55 to 59 years	160
60 and 61 years	51
62 to 64 years	51
65 and 66 years	20
67 to 69 years	25
70 to 74 years	29
75 to 79 years	38
80 to 84 years	12
85 years and over	28

Subject	Number
Race	
White alone	2,199
Black or African American alone	937
American Indian and Alaska Native alone	139
Asian Alone	61
Native Hawaiian and Other Pacific Islander alone	4
Some Other Race alone	3,007
Two or More Races	323
Hispanic or Latino Origin by Race	
Not Hispanic or Latino	1,194
White alone	168
Black or African American alone	877
American Indian and Alaska Native alone	28
Asian Alone	48
Native Hawaiian and Other Pacific Islander alone	3
Some Other Race alone	22
Two or More Races	48
Hispanic or Latino	5,476
White alone	2,031
Black or African American alone	60
American Indian and Alaska Native alone	111
Asian Alone	13
Native Hawaiian and Other Pacific Islander alone	1
Some Other Race alone	2,985
Two or More Races	275
Housing Units	
Total	1,434
Occupancy Status	
Occupied	1,356
Vacant	78
Tenure	
Owned with a mortgage or a loan	239
Owned free and clear	45
Renter-occupied	1,072
Household Size	
1-person household	163
2-person household	212
3-person household	195
4-person household	212
5-person household	206
6-person household	149
7-or-more-person household	219
Average Median Household Income	$27,350

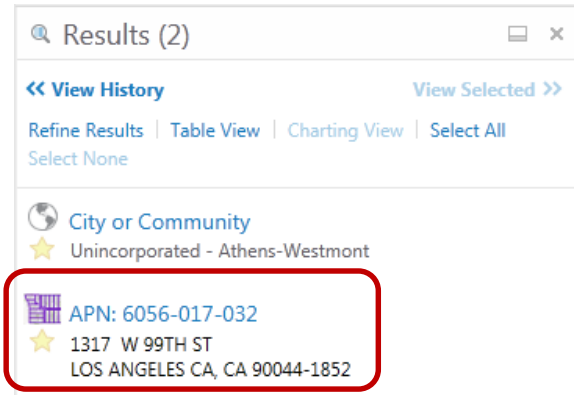
3. Essential Functions

3.1 Identify

Go back to the “Default” Layer Theme layer. Zoom into an area until you see parcel boundaries (best to be at 1:2,257 scale or higher).



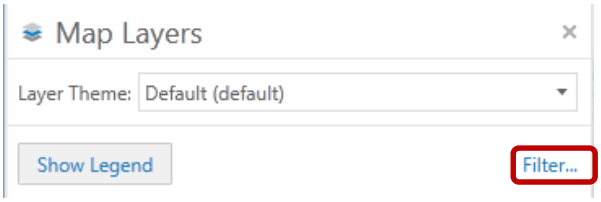
Go to the “Identify and Query” tab and click on the “Point Identify” tool. Use your mouse and click on a parcel. The Results window will appear on the left-hand side of your screen. In this instance, we want to focus on the second result which is tied to the parcel layer (the top result that was returned is associated with a base map layer).



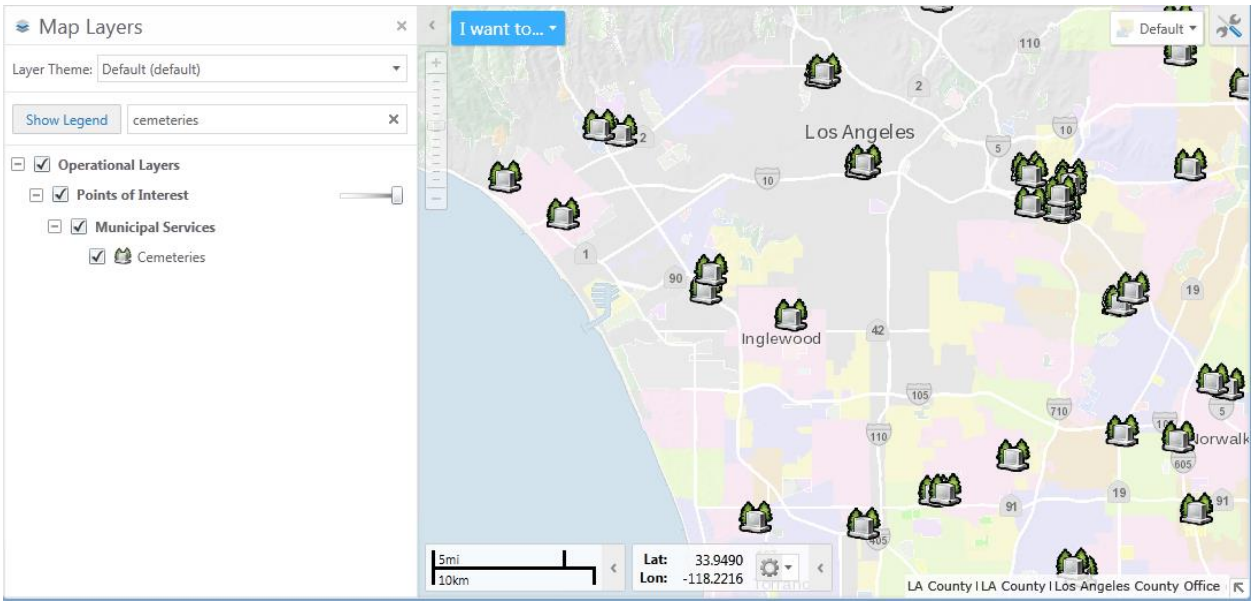
Exit the results window by clicking on the “x” located on the top right of the window.

3.2 Filter

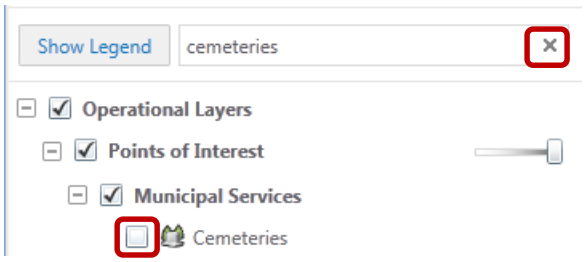
There is a method to search for a dataset if you want to avoid going through all the map themes and expanding the group layers. Click on “Filter…” and type in the dataset you would like to find in the “Filter” search box and change the Map Theme to “All Layers.”



The figure below shows the results for “cemeteries” entered in the Filter search box. Turn on the cemeteries layer.



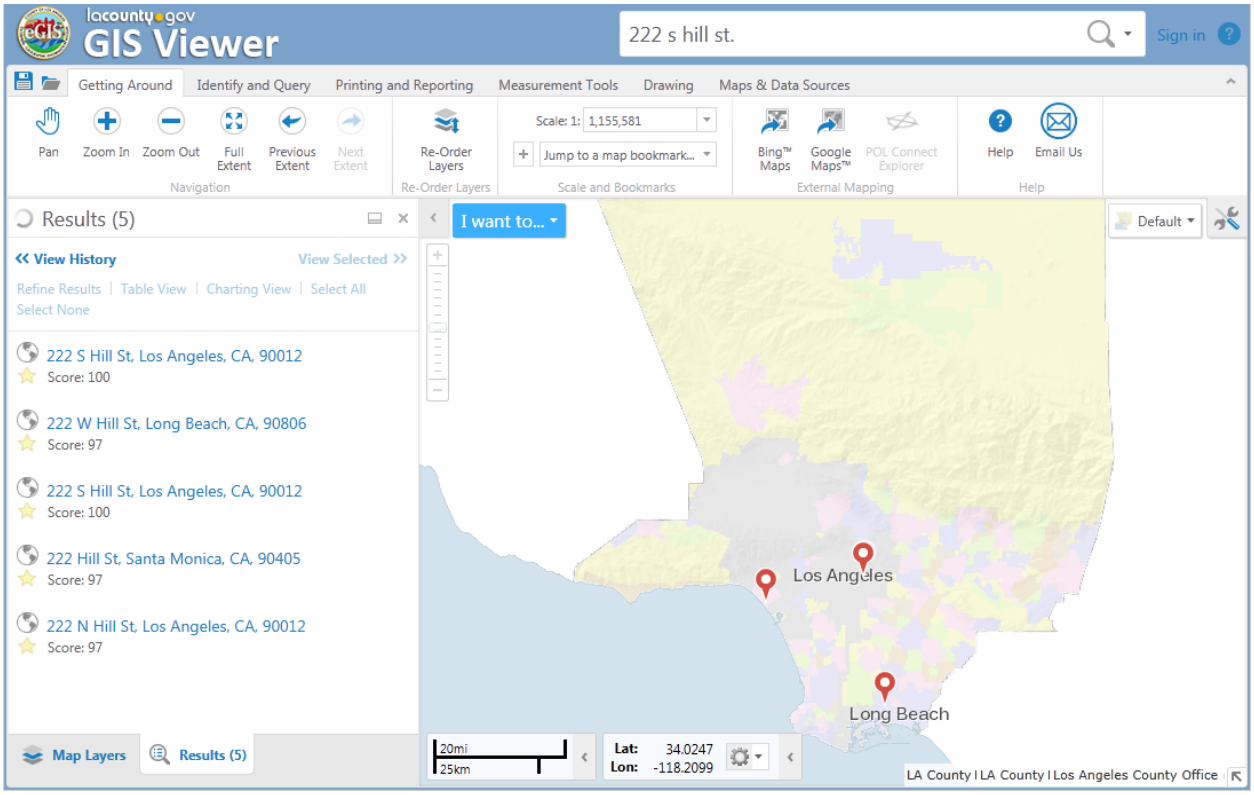
To go back to the main page, turn off the cemeteries layer and click on the x mark in the Filter box.



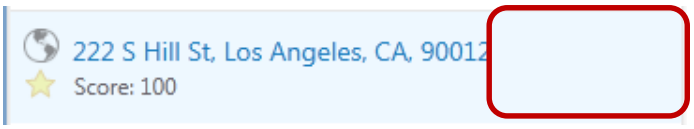
3.3 Global Search Bar

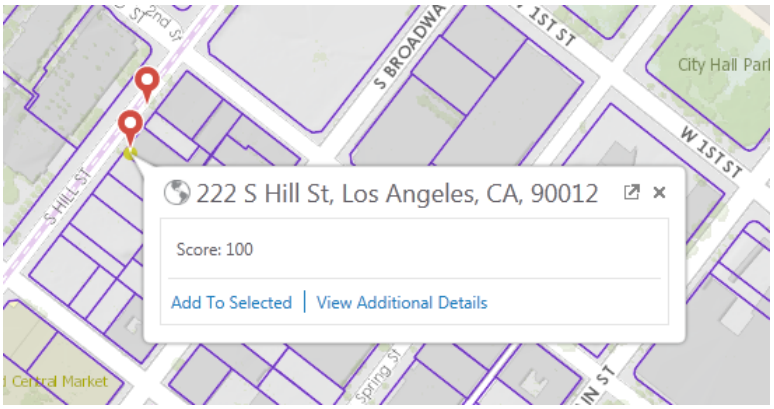
The Global Search Bar, located at the top right of your application, allows you to search for an address, feature (that has been configured), or parcel ID.

To search for an address, type it in and hit Enter. You don't need the full address but it may return unwanted ones. In this example, I used "222 s hill st." and it returned 5 records. The address is geocoded against the County's CAMS Nationwide Locator (see http://egis3.lacounty.gov/dataportal/2015/05/11/la-county-cams-address-locator/ for more information). The higher the score, the better the accuracy.

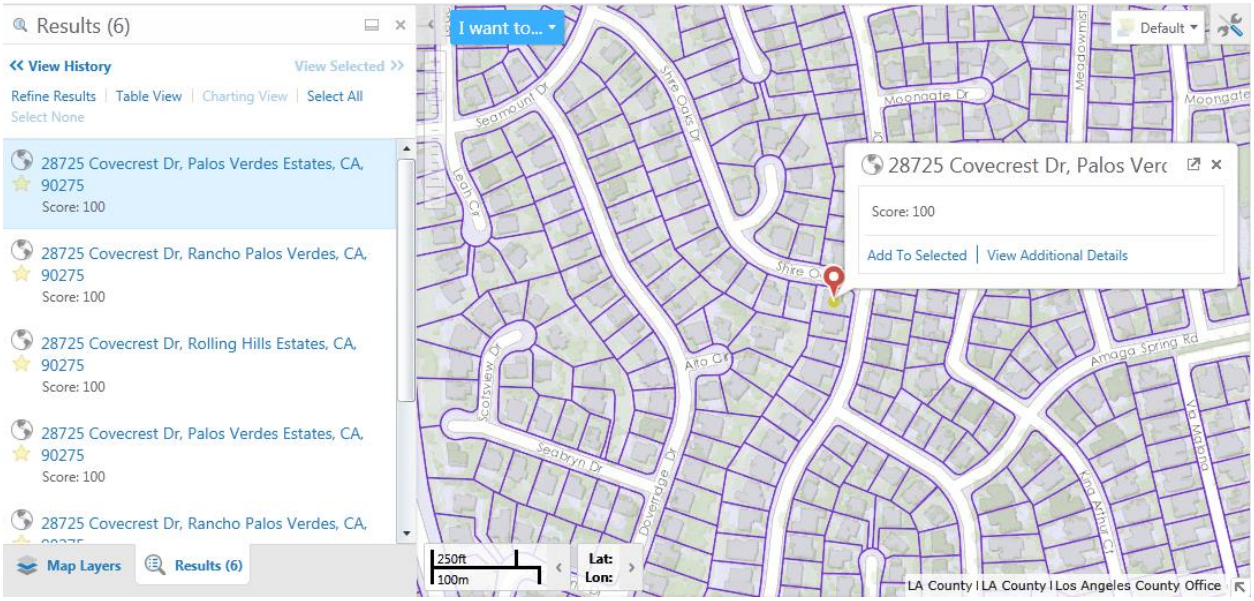


Click on the blank area next to the first result and the viewer will zoom into the location

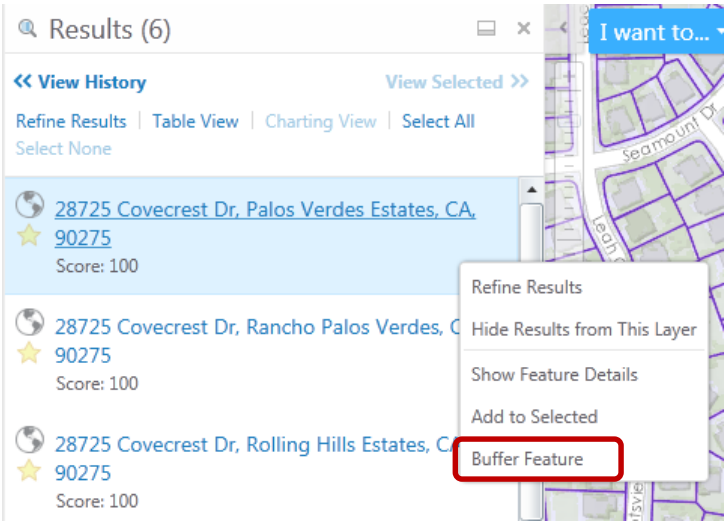


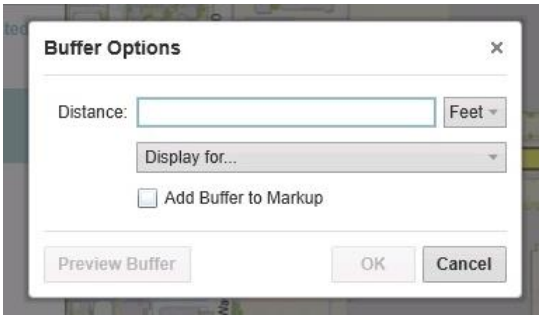


Type in another address, “28725 Covecrest Dr”, hit Enter, and select the top result to zoom into the area.

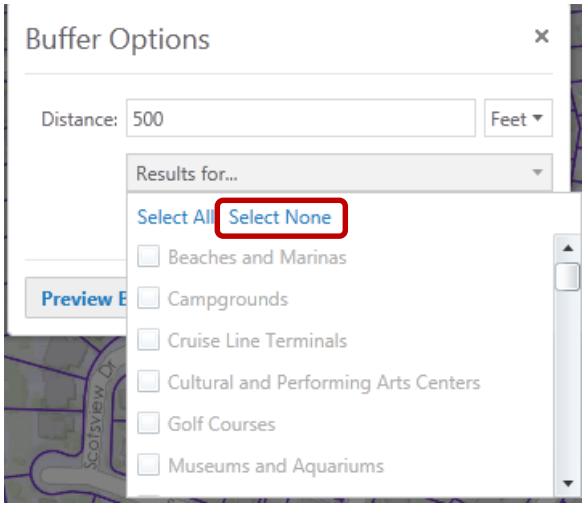


At this juncture, you may want to analyze the surrounding landscape from your current location. Specifically, you want to get a list of all the parcels within a half-mile radius of this location. **Right-click** in the blue area of the first result and select “Buffer Feature.”

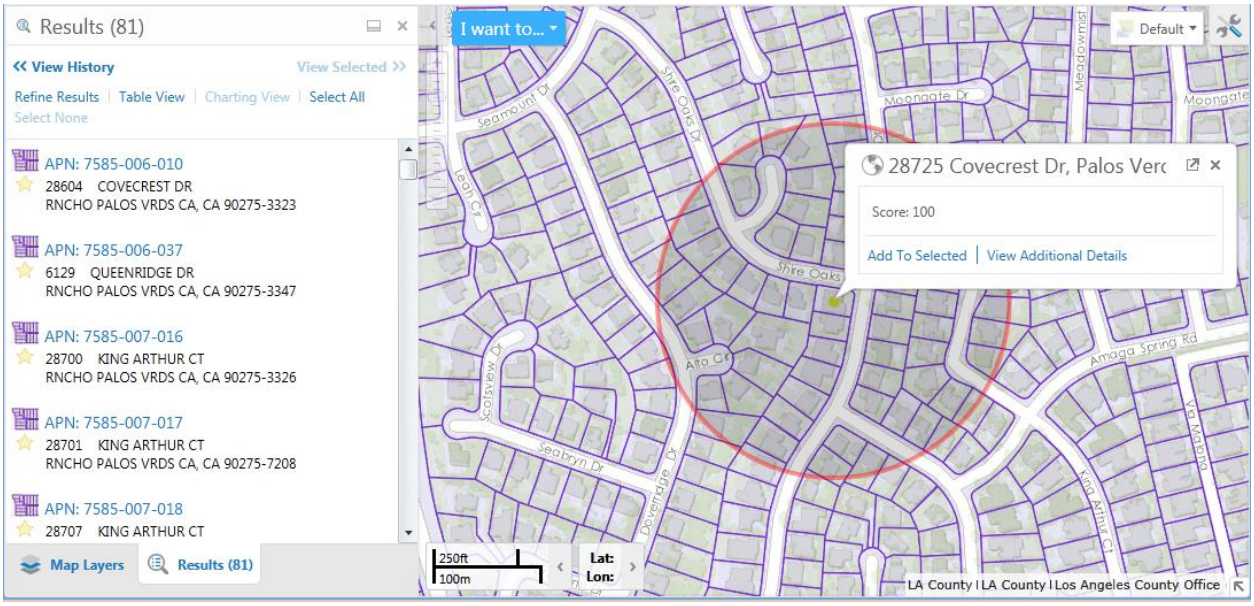




For the Distance box, enter **500** and leave the units to Feet. The default function will search for *everything* across all datasets that is within 0.5 miles from 28725 Covecrest Dr in Palos Verdes Estates. Click on "Select None" under the "Display for" options. Then find and click on the box next to "Parcels" to activate it – make sure there is a check mark inside the box. Then click on the box next to "Add Buffer to Markup" – again, make sure there is a check mark inside the box.



Click on the **OK** box and zoom out until you can see the buffer. In the Results pane, 81 parcels have been identified to be within 500 feet of your parcel of interest.



3.4 Share your results

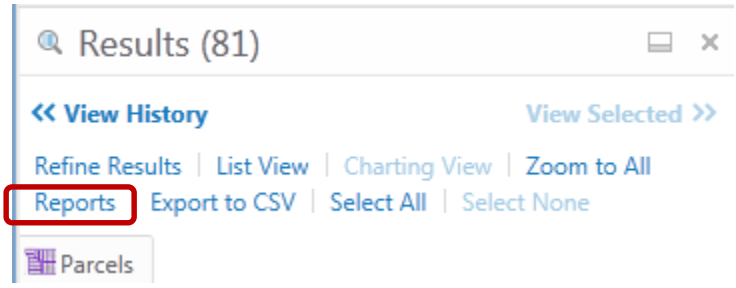
3.4.1 Export to Excel

You have the opportunity to export the results into a format that can be brought into Microsoft Excel. In the results window, click on “Table View” and then “Export to CSV.” Enter a file name, save it to a location of your choice, and click Save. Here is a glimpse of the Excel worksheet.

	A	B	C	D	E	F	G	H
1	Parcel ID	Parcel Number	Number	Fraction	Street Dir	Unit	Street	CITY
2	7585006010	7585-006-010	28604				COVECREST DR	RNCHO PALOS VRDS CA
3	7585006037	7585-006-037	6129				QUEENRIDGE DR	RNCHO PALOS VRDS CA
4	7585007016	7585-007-016	28700				KING ARTHUR CT	RNCHO PALOS VRDS CA
5	7585007017	7585-007-017	28701				KING ARTHUR CT	RNCHO PALOS VRDS CA
6	7585007018	7585-007-018	28707				KING ARTHUR CT	RNCHO PALOS VRDS CA
7	7585007019	7585-007-019	28713				KING ARTHUR CT	RNCHO PALOS VRDS CA
8	7585007020	7585-007-020	28719				KING ARTHUR CT	RNCHO PALOS VRDS CA
9	7585007033	7585-007-033	28626				COVECREST DR	RNCHO PALOS VRDS CA

3.4.2 Create a Report

You may create mailing labels with the returned results. Click on Reports:



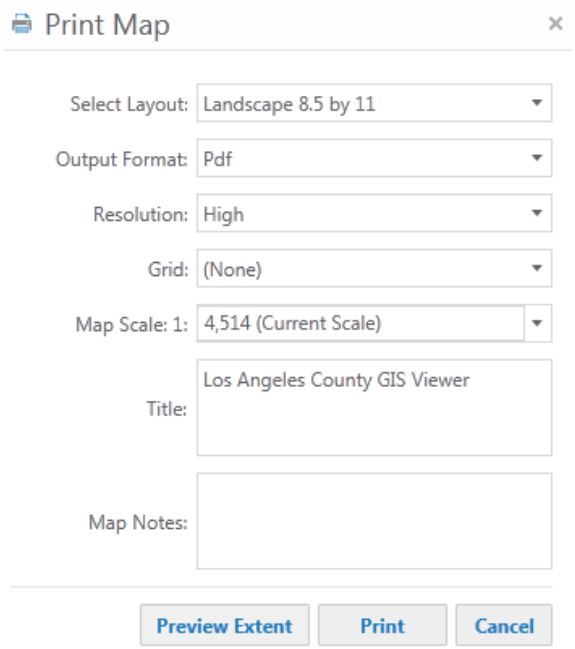
The default “Mailing Labels” will appear and then click on “Run Report.” Click on Download Report and a new pop-up window will appear. You may save the document as a PDF.

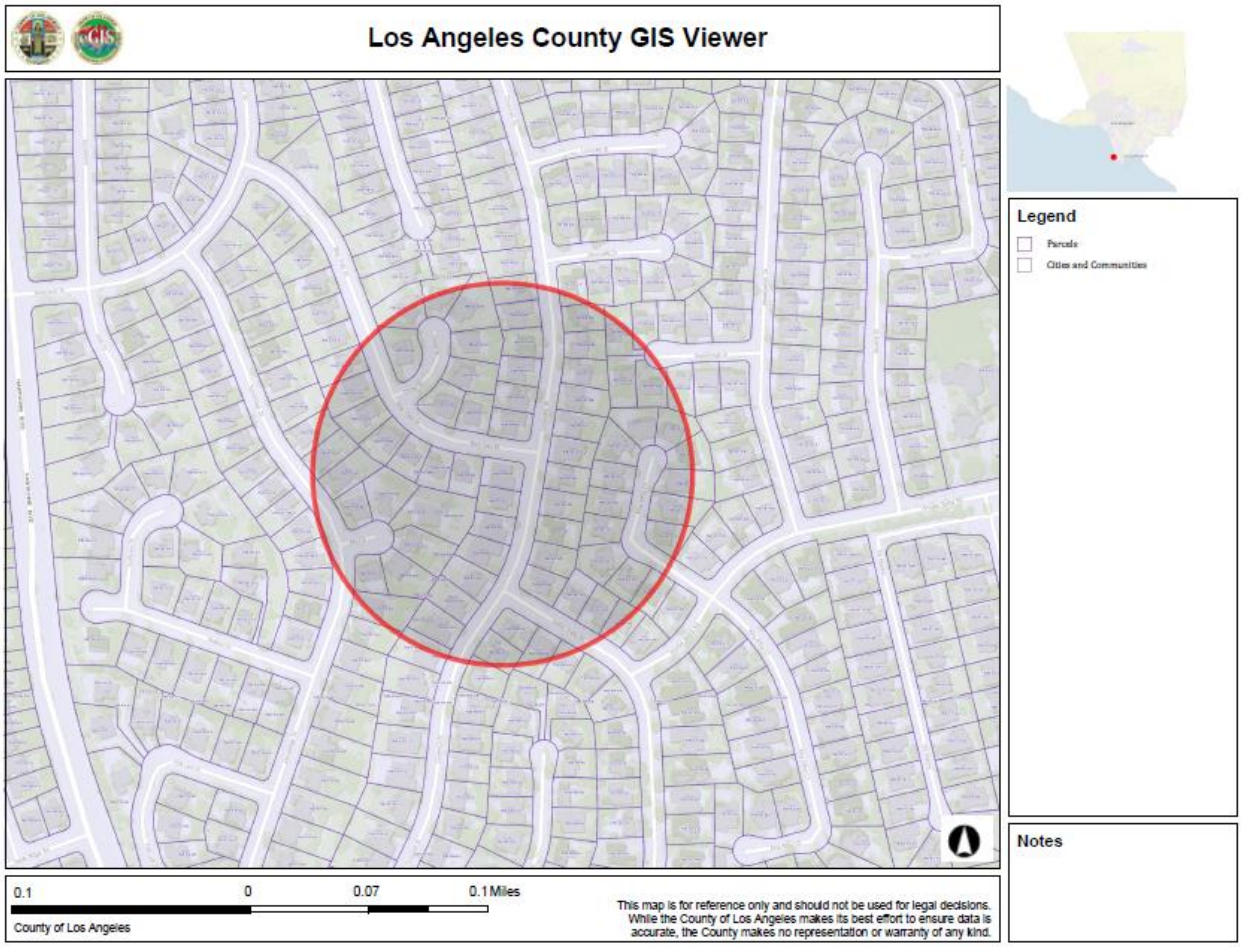
Resident 28820 INDIAN VALLEY RD RNCHO PALOS VRDS CA 90275-4716	Resident 28826 INDIAN VALLEY RD RNCHO PALOS VRDS CA 90275-4716	Resident 28736 KING ARTHUR CT RNCHO PALOS VRDS CA 90275-3326
Resident 28812 INDIAN VALLEY RD RNCHO PALOS VRDS CA 90275-4716	Resident 28750 COVECREST DR RNCHO PALOS VRDS CA 90275-3325	Resident 28730 COVECREST DR RNCHO PALOS VRDS CA 90275-3325
Resident 28718 COVECREST DR RNCHO PALOS VRDS CA 90275-3325	Resident 28704 COVECREST DR RNCHO PALOS VRDS CA 90275-3325	Resident 28738 COVECREST DR RNCHO PALOS VRDS CA 90275-3325
Resident 28744 COVECREST DR RNCHO PALOS VRDS CA 90275-3325	Resident 28620 COVECREST DR RNCHO PALOS VRDS CA 90275-3323	Resident 28710 COVECREST DR RNCHO PALOS VRDS CA 90275-3325

Once you’re done, go back to the GIS Viewer tab and exit the “Feature Reports” dialogue box.

3.4.3 Print a Map

Go to the Printing and Reporting tab click on the “Print Map” button. There are a variety of options in which you can tailor your printed map. You can adjust the page layout, output format, resolution, and map scale. If you are content with the current setup, click on “Create File.”


Print Map
Select Layout: Landscape 8.5 by 11
Output Format: Pdf
Resolution: High
Grid: (None)
Map Scale: 1: 4,514 (Current Scale)
Title: Los Angeles County GIS Viewer
Map Notes:
Preview Extent
Print
Cancel


Los Angeles County GIS Viewer
Legend
Parcels
Cities and Communities
Notes
0.1
0
0.07
0.1 Miles
County of Los Angeles
This map is for reference only and should not be used for legal decisions. While the County of Los Angeles makes its best effort to ensure data is accurate, the County makes no representation or warranty of any kind.

3.5 Batch Geocode

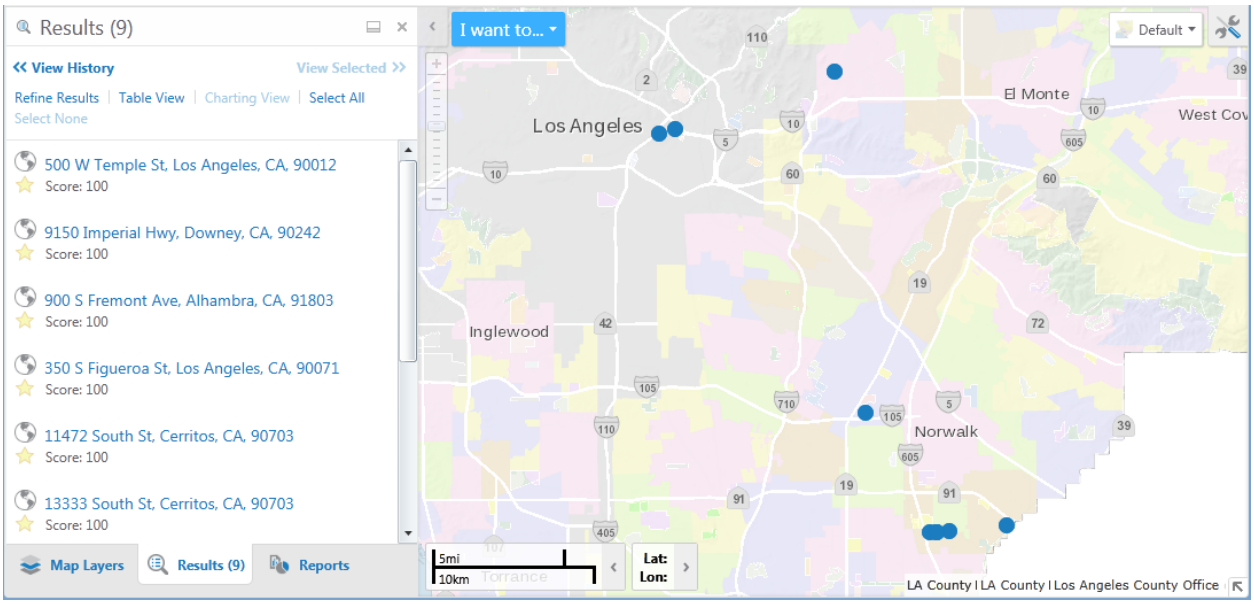
Users can upload an Excel file, with addresses, and geocode it against the County's Locator. The maximum number of records that can be geocoded is 1,000. Addresses can be divided into three columns (Address, City, and Zip Code) or entered into one column:

Address	City	Zip Code
500 W. Temple St.	Los Angeles	90012
9150 Imperial Highway	Downey	90242
900 S. Fremont Ave.	Alhambra	91803

OR

SingleLine
500 W. Temple St., Los Angeles 90012
9150 Imperial Highway, Downey 90242
900 S. Fremont Ave., Alhambra 91803

In the "Maps and Data Sources" > click on "Batch Geocode". Find your Excel table (make sure the file is not open), follow the instructions, and click on Done. The geocoded points will appear as blue dots and it will show up in your list of map layers. You cannot save the geocoded points but you are able to identify them.



4. Conclusion

Now that you have an introductory knowledge of the GIS Viewer, go ahead and explore what is in your area and create your own set of maps!

If you have any comments or questions, please direct them to eGIS@isd.lacounty.gov